



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,392	10/26/2006	Petteri Lannes	METSO-67	3574
36528	7590	01/11/2008	EXAMINER	
STIENNON & STIENNON 612 W. MAIN ST., SUITE 201 P.O. BOX 1667 MADISON, WI 53701-1667			SUGLO, JANET L	
			ART UNIT	PAPER NUMBER
			2857	
			MAIL DATE	DELIVERY MODE
			01/11/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/598,392	Applicant(s) LANNES ET AL.	
	Examiner Janet Suglo	Art Unit 2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. **Claims 21, 22, 24, 25, 31, 32, 33, 34, and 37** are objected to because of the following informalities: Each of the above listed claims are objected to because they state "and/or" which should be replaced with --or--. Appropriate correction is required.
2. **Claim 25** is objected to because of the following informalities: Claim 25, line 3 states "measured/determined" which should be replaced with --measured or determined--. Claim 25, line 7 states "signals/measured" which should be replaced with --signals or measured--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. **Claim 22** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear whether the diagnostic units are included in addition to every "or" statement or whether the diagnostic units are only include with the last "or" statement of quality assessment systems. For the purposes of this office action, it will be assumed that the diagnostic unit" are included only when quality assessment systems are included.

5. **Claims 24 and 28-32** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It appears that the "and/or" statement is distinguishing between "action" and "an action" and therefore does not provide two alternatives. Claims 28-32 are rejected 35 U.S.C. 112, second paragraph, based on their dependency on claim 24.
6. **Claim 24** recites the limitation "said automatic service process instructions for action" in lines 1 and 2. There is insufficient antecedent basis for this limitation in the claim.
7. **Claim 26** recites the limitation "the message relay system" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. **Claim 21, 22, 24, 26, 27, 31, 33-39 and 41-43** is rejected under 35 U.S.C. 102(b) as being anticipated by Maki (US PGPub 2002/0052715).

With respect to **claim 21**, Maki teaches a method in the maintenance of machines, processes, automation systems and equipment relating to papermaking (e.g., [0002], [0003]), wherein a teleservice connection based on a data communication link is arranged between a production plant and a teleservice center (e.g., [0025]), and wherein the machine relating to papermaking is located at a production plant which is equipped with a plant data system (e.g., Figure 2), and wherein the condition, state and/or performance of the machine units and/or processes and/or automation systems of a production line at the production plant are monitored by monitoring systems in order to recognize emergency situations (e.g., Figure 2; [0030]),

in which method in a recognized emergency situation an automatic service process is started based on signals given by said monitoring systems (e.g., [0004], [0030]), and

wherein the method functions statefully, whereby the method ensures that all stages will be carried out and that all messages will reach their destination (e.g., [0029]).

With respect to **claim 24**, Maki teaches based on said automatic service process instructions for action and/or an action are formed automatically in order to remedy failure situations at the production plant (e.g., [0030]).

With respect to **claim 26**, Maki teaches a data communication link is arranged between the message relay system and the plant data system (e.g., Figure 2).

With respect to **claim 27**, Maki teaches data measured earlier on the same or a similar object is utilized in the failure situation analysis (e.g., [0004]).

With respect to **claim 31**, Maki teaches the automatically generated instructions for action are delivered as an automatic message to service staff of the teleservice center or to service staff of the production plant (e.g., [0025], [0030]).

With respect to **claim 33**, Maki teaches a system in the maintenance of machines, processes, automation systems and equipment relating to papermaking (e.g., [0002], [0003]), where the machine relating to papermaking is located at a production plant which is equipped with a plant data system (e.g., Figure 2), and wherein a teleservice connection based on a data communication link is arranged between the production plant and the teleservice center (e.g., [0025]), and where the condition, state and/or performance of machine units and/or processes and/or automation systems of a production line at the production plant are monitored by monitoring systems, in order to recognize emergency situations (e.g., Figure 2; [0030]), which system comprises means for providing an automatic service process (e.g., [0004]), wherein the system is stateful whereby the system functions in such a way that all messages will reach their destination and all defined stages will be carried out (e.g., [0029]).

With respect to **claims 22 and 34**, Maki teaches the monitoring systems comprise conditions monitoring systems (e.g., Figure 2: 24).

With respect to **claim 35**, Maki teaches means for providing automatically generated instructions for action (e.g., Figure 2, [0030]).

With respect to **claim 36**, Maki teaches means for collecting automatic measured data from the machine units of the production plant (e.g., [0027]);

means for transmitting the measured data from the production plant to a teleservice center (e.g., Figure 2: Internet);

means for analyzing the measured data at the teleservice center (e.g., [0030]);

means for generating automatic instructions for action at the teleservice center (e.g., [0030]); and

means for transmitting the automatic instructions for action to inform service staff (e.g., [0030], [0033]).

With respect to **claim 37**, Maki teaches a data-collecting unit arranged to collect and store data arriving from the monitoring systems (e.g., Figure 2: 10, 13); and

a message relay system adapted to receive triggering signals and data arriving from the data-collecting unit and/or itself to form a triggering signal (e.g., Figure 2: 10, 13, 12, 14).

With respect to **claim 38**, Maki teaches a data communication link is arranged between the message relay system and the plant data system (e.g., Figure 2: Internet).

With respect to **claim 39**, Maki teaches the message relay system is arranged to form and transmit messages in a structured form (e.g., Figure 2: Internet).

With respect to **claim 41**, Maki teaches the messages formed by the message relay system are encrypted or protected in some other manner (e.g., [0029]).

With respect to **claim 42**, Maki teaches means for generating a video and audio link between the production plant and the teleservice center (e.g., [0007]).

With respect to **claim 43**, Maki teaches the link between the production plant and the teleservice center comprises a quick-acting key, which is arranged to open a direct data transmission link without any essential delay between the operator at the production plant and the staff at the teleservice center, as well as the means required for the data transmission link (e.g., Figure 2, [0018], [0025]).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. **Claim 23, 25, 28-30, and 32** are rejected under 35 U.S.C. 103(a) as being unpatentable over Maki in view of Hill, Jr. et al. (US Patent 5,057,866) (hereinafter "Hill").

With respect to **claim 23**, Maki teaches parent claim 21, but does not specify an established limit value. Hill teaches said automatic service process is started when the value of measured data collected from the monitoring systems exceeds an established limit value (e.g., Hill: col 6, ln 1-31). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Maki to include the threshold levels of Hill because the threshold technique quickly alerts the diagnostic system to resolve the issue in a time saving and money saving manner (e.g., Hill: col 1, ln 1-40).

With respect to **claim 25**, Maki further teaches wherein the automatic service process comprises stages, in which

in the production plant a data collecting unit is arranged, which receives the signals/measured data arriving from the monitoring systems and stores them in a database (e.g., Maki: Figure 2));

a message relay system is arranged at the production plant to receive the signals arriving from the data-collecting unit, which signals comprise triggering signals and measured data (e.g., Maki: Figure 2);

based on said signals and/or said triggering signals a failure situation is defined as having occurred (e.g., Maki: [0030]);

a data communication link is arranged between the message relay system and the teleservice center (e.g., Maki: Figure 2);

in a failure situation, an automatic failure report is transmitted to the teleservice center by using said data communication link (e.g., Maki: [0030]);

the failure situation is analyzed automatically at the teleservice center (e.g., Maki: [0030]); and

based on the analysis, instructions for action are generated automatically to remedy the failure situation (e.g., Maki: [0004], [0030]).

Maki does not explicitly teach limit values. Hill teaches for magnitudes measured/determined by the monitoring systems limit values are established, and any exceeding or falling short of these will cause a triggering signal (e.g., Hill: col 6, ln 1-20). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Maki to include the threshold levels of Hill because the threshold technique quickly alerts the diagnostic system to resolve the issue in a time saving and money saving manner (e.g., Hill: col 1, ln 1-40).

With respect to **claim 28**, Maki does not explicitly teach adjusting operating parameters. Hill teaches changing threshold values or formulas used under specific conditions (e.g., Hill: col 6, ln 32-48). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Maki to include the threshold levels of Hill

because the threshold technique quickly alerts the diagnostic system to resolve the issue in a time saving and money saving manner (e.g., Hill: col 1, ln 1-40).

With respect to **claim 29**, Maki does not explicitly teach putting off the service action. Hill teaches that changing the threshold values will subsequently change the state that the machine is interpreted as being in. As a result the new status designation will put off the service action if the threshold value has been moved to place the machine in a acceptable threshold range (e.g., Hill: col 6, ln 32-63). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Maki to include the threshold levels of Hill because the threshold technique quickly alerts the diagnostic system to resolve the issue in a time saving and money saving manner (e.g., Hill: col 1, ln 1-40).

With respect to **claim 30**, Maki does not explicitly teach putting off the service action. Hill teaches that changing the threshold values will subsequently change the state that the machine is interpreted as being in. As a result the new status designation will put off the service action if the threshold value has been moved to place the machine in a acceptable threshold range until a typical service would occur (e.g., Hill: col 6, ln 8-63). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Maki to include the threshold levels of Hill because the threshold technique quickly alerts the diagnostic system to resolve the issue in a time saving and money saving manner (e.g., Hill: col 1, ln 1-40).

With respect to **claim 32**, Maki teaches said automatic service process instructions for action and/or an action are formed automatically in order to remedy failure situations at the production plant comprise a control action (e.g., Maki: [0030]). Maki does not teach adjusting operating parameters. Hill teaches parameters of the production plant's machine unit are adjusted automatically (e.g., Hill: col 6, ln 32-40). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Maki to include the threshold levels of Hill because the threshold technique quickly alerts the diagnostic system to resolve the issue in a time saving and money saving manner (e.g., Hill: col 1, ln 1-40).

12. **Claim 40** is rejected under 35 U.S.C. 103(a) as being unpatentable over Maki in view of Takase et al. (US PGPub 2003/0236857) (hereinafter "Takase"). Maki teaches parent claim 39, but does not specify the use of XML formatted messages. Takase teaches using XML messages across an internet connection (e.g., Takase: [0006]). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Maki to include the XML messaging of Takase because XML messages are popular data formats used over the internet which efficiently carry data (e.g, Takase: [0006], [0009]).

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Carter et al. (US Patent 5,038,319) teaches a system for recording and remotely accessing operating data in a reproduction machine.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janet Suglo whose telephone number is 571-272-8584. The examiner can normally be reached on Monday - Thursday from 6:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eliseo Ramos-Feliciano can be reached on 571-272-7925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



ELISEO RAMOS-FELICIANO
SUPERVISORY PATENT EXAMINER